



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> <b>PCT/US99/20013</b> <b>(22) International Filing Date:</b> <b>1 September 1999 (01.09.99)</b> <b>(30) Priority Data:</b> <b>60/098,704                      1 September 1998 (01.09.98)                      US</b> <b>(71)(72) Applicants and Inventors:</b> <b>PAUSCH, Mark, Henry</b> <b>[US/US]; American Cyanamid Company, P.O. Box 400,</b> <b>Clarksville, NJ 08543-0400 (US). WESS, Jorgen. [-/US];</b> <b>Laboratory of bioorganic Chemistry, NIH-NIDDK, Build-</b> <b>ing 8A, Room B1A-05, 9000 Rockville Pike, Bethesda,</b> <b>MD 20892 (US).</b> <b>(74) Agents:</b> <b>GARRETT, Arthur, S. et al.; Finnegan, Henderson,</b> <b>Farabow, Garrett &amp; Dunner, L.L.P., 1300 I Street, N.W.,</b> <b>Washington, DC 20005-3315 (US).</b>		<b>(81) Designated States:</b> <b>AE, AL, AM, AT, AU, AZ, BA, BB, BG,</b> <b>BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE,</b> <b>ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,</b> <b>KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,</b> <b>MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,</b> <b>SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ,</b> <b>VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW,</b> <b>SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG,</b> <b>KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY,</b> <b>DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,</b> <b>SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW,</b> <b>ML, MR, NE, SN, TD, TG).</b>  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> <b>5 October 2000 (05.10.00)</b>
<b>(54) Title:</b> <b>METHODS FOR IMPROVING THE FUNCTION OF HETEROLOGOUS G PROTEIN-COUPLED RECEPTORS</b>  <b>(57) Abstract</b>  <p>This invention relates to mutant G protein-coupled receptors with improved G-protein coupling and receptor response, yeast cells expressing such receptors, vectors useful for making such cells, and methods of making and using same.</p>		